SMART
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BUSINESS

Leuze electronic

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Part no.: 50128986
CSL710-T05-880.A-M12
Light curtain transmitter

CE   CSA
c   US

Figure can vary

Contents

Leuze electronic GmbH + Co. KG, In der Braike 1, 73277 Owen
Phone: +49 7021 573-0, Fax: +49 7021 573-199

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Part no.: 50128986 – CSL710-T05-880.A-M12 – Light curtain transmitter

Technical data

Basic data	
Series	710
Operating principle	Throughbeam principle
Device type	Transmitter
Contains	2x BT-NC sliding block
Application	Precise object detection

Optical data	
Operating range	Guaranteed operating range
Operating range	0.1 ... 3.5 m
Operating range limit	Typical operating range
Operating range limit	0.1 ... 4.5 m
Measurement field length	880 mm
Number of beams	176 Piece(s)
Beam spacing	5 mm
Light source	LED , Infrared
LED light wavelength	940 nm

Measurement data	
Minimum object diameter	10 mm

Electrical data	
Protective circuit	Polarity reversal protection Short circuit protected Transient protection

Performance data	
Supply voltage U_B	18 ... 30 V , DC
Residual ripple	0 ... 15 % , From U_B
Open-circuit current	0 ... 215 mA , The specified values refer to the entire package consisting of transmitter and receiver.

Timing	
Readiness delay	400 ms
Cycle time	5.68 ms

Connection	
Number of connections	1 Piece(s)
Plug outlet	Axial

Connection 1	
Type of connection	Connector
Function	Connection to receiver Sync-input Voltage supply
Thread size	M12
Type	Male
Material	Metal
No. of pins	5 -pin
Encoding	A-coded

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Mechanical data	
Design	Cubic
Dimension (W x H x L)	29 mm x 35.4 mm x 953 mm
Housing material	Metal , Aluminum
Lens cover material	Plastic / PMMA
Net weight	1,050 g
Housing color	Red
Type of fastening	Groove mounting Via optional mounting device

Operation and display	
Type of display	LED
Number of LEDs	1 Piece(s)

Environmental data	
Ambient temperature, operation	-30 ... 60 °C
Ambient temperature, storage	-40 ... 70 °C

Certifications	
Degree of protection	IP 65
Protection class	III
Certifications	c CSA US
Standards applied	IEC 60947-5-2

Classification	
Customs tariff number	90314990
eCl@ss 8.0	27270910
eCl@ss 9.0	27270910
ETIM 5.0	EC002549
ETIM 6.0	EC002549

Dimensioned drawings

All dimensions in millimeters

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Part no.: 50128986 – CSL710-T05-880.A-M12 – Light curtain transmitter
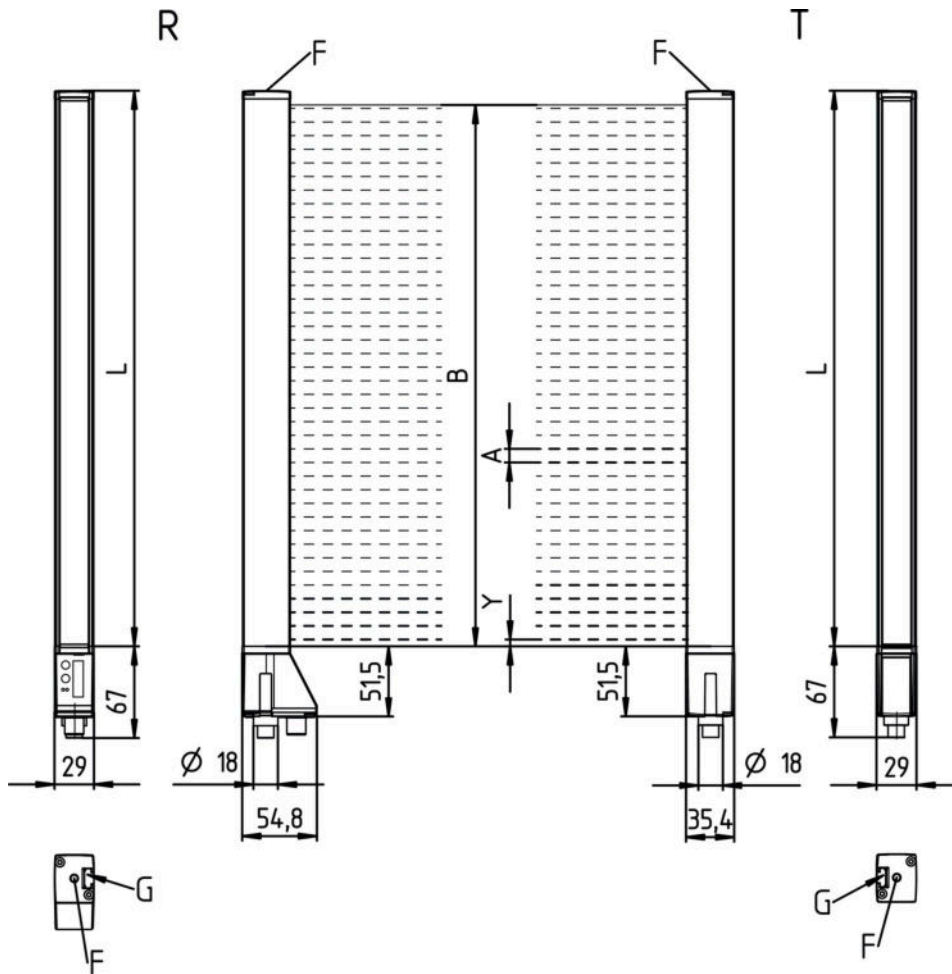
A Beam spacing 5 mm
B Measurement field length 880 mm
F M6 thread
G Fastening groove
L Profile length 888 mm
T Transmitter
R Receiver
Y

A PWR / SW IN/OUT

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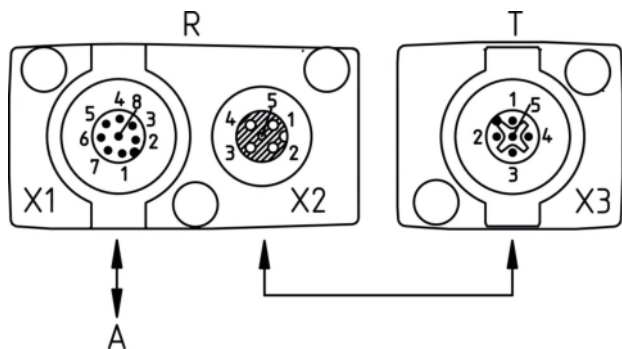
Electrical connection

Connection 1	
Type of connection	Connector
Function	Connection to receiver Sync-input Voltage supply
Thread size	M12
Type	Male
Material	Metal
No. of pins	5 -pin
Encoding	A-coded

Pin	Pin assignment
1	FE/SHIELD
2	V+
3	GND
4	RS 485 Tx+
5	RS 485 Tx-

Operation and display

LEDs

LED	Display	Meaning
1	Green, continuous light	Continuous mode
	Off	No communication with the receiver / waiting for trigger
	green, flashing in sync with the measurement	Measurement frequency display

Suitable receivers

	Part no.	Designation	Article	Description
	50128898	CSL710-R05-880.A/L-M12	Light curtain receiver	Application: Precise object detection Operating range: 0.1 ... 3.5 m Selectable inputs/outputs: 4 Piece(s) Service interface: IO-Link Connection: Connector, M12, 8 -pin

Part number code

Part designation: **CSL710-XYY-ZZZZ.A/B-CCC**

CSL710	**Operating principle:** CSL: switching light curtain of the 710 series
X	**Function classes:** T: transmitter R: receiver

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YY	**Beam spacing:** 05: 5 mm 10: 10 mm 20: 20 mm 40: 40 mm
ZZZZ	**Measurement field length [mm], dependent on beam spacing:** Value, see technical data
A	**Equipment:** A: connector outlet, axial
B	**Interface:** L: IO-Link
CCC	**Electrical connection:** M12: M12 connector

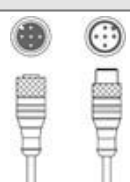| Note |
| --- |
| A list with all available device types can be found on the Leuze electronic website at www.leuze.com. |

Notes

Observe intended use!
• This product is not a safety sensor and is not intended as personnel protection. • The product may only be put into operation by competent persons. • Only use the product in accordance with its intended use.

For UL applications:
• For UL applications, use is only permitted in Class 2 circuits in accordance with the NEC (National Electric Code). • These proximity switches shall be used with UL Listed Cable assemblies rated 30V, 0.5A min, in the field installation, or equivalent (categories: CYJV/CYJV7 or PVVA/PVVA7)

Accessories

Connection technology - Interconnection cables

	Part no.	Designation	Article	Description
	50129781	KDS DN-M12-5A-M12-5A-P3-050	Interconnection cable	Suitable for interface: IO-Link, DeviceNet, CANopen Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connection 2: Connector, M12, Axial, Male, A-coded, 5 -pin Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR

Mounting technology - Swivel mounts

	Part no.	Designation	Article	Description
	429046	BT-2R1	Mounting bracket set	Contains: 2x BT-R swivel mount, 1 cylinder for mounting on the light curtain Fastening, at system: Through-hole mounting Mounting bracket, at device: Clampable Type of mounting device: Turning, 360° Material: Metal, Plastic

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Note

A list with all available accessories can be found on the Leuze electronic website in the Download tab of the article detailed page.